

- Water
- Energy
- ACEC

- Wastewater
- Air
- Regulations

- Transportation
- Solid & Hazardous Waste
- Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input type="checkbox"/> Order of Conditions <input checked="" type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	11.3±			
New acres of land altered		0		
Acres of impervious area	0.188±	1.479±	1.666±	
Square feet of new bordering vegetated wetlands alteration		296±		
Square feet of new other wetland alteration		37,750± (riverfront area)		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	2,061s.f.	29,939 s.f.	32,000 s.f.	
Number of housing units	1	31	32	
Maximum height (in feet)	30	5	35	
TRANSPORTATION				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	2	74	76	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	440 Estimated	10,120	10,560	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/ treatment	440	10,120	10,560	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

- Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

- Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

- Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

- A. The existing site contains a single family house with associated 'out' structures such as a barn, shed, and garage. There is a New England Power Company easement which runs through the north to south. The site is mostly cleared land with scrub grasses growing in all areas that are not wetlands. The area adjacent to Wetherells pond is previously disturbed land, it appears that soils mining may have taken place in this area. The remainder of the site is previously disturbed uplands surrounded by the Ten Mile River to the east and south with a tributary from Wetherells pond feeding into the ten mile river during the spring along the western most boundary. The site is accessed from the end of Witherell Place through an 18' wide easement which passes over one private property and the adjacent conservation land. The point of access is a concrete bridge 12'± in width erected by Mass Electric company in the last 5 years or so.

The groundwater elevation is estimated to be at the elevation of the wetlands, which is approximately 192'. The on-site soils as classified by the Soil Survey for Norfolk and Suffolk Counties Massachusetts are Ua – Udorthents. These soils have rapid to very rapid permeability in the subsoil and substratum, respectively, and a seasonal high groundwater level equivalent to any surrounding water body.

The construction activities will include the regrading of the site as shown on the attached plans, the construction of seven townhouse buildings as shown to house a total of 32 townhouse units, each unit will have internal drive-under parking, associated utilities and visitor parking as shown on the site plans. There is a limited disturbance of 300 s.f. of bordering vegetated wetlands for a limited crossing driveway. There is currently no onsite stormwater management system and stormwater flows from the existing dirt driveway to the bordering vegetated wetlands with untreated sediment and erosion potential. The disturbance is minimized to the area required for the driveway and utility installation.

All utilities are intended to be subsurface including the installation of a new sewer main within Witherell Place and service to the subject and adjacent parcels via a gravity system which will flow under the Ten Mile River through a double walled PVC pipe for burst protection. This pipe is intended to be installed in the summer months when there is no water flow within the ten mile as observed June, July and August 2005. This is the listed disturbance and reconstruction noted within the NOI. The design plans incorporate erosion control and construction sequencing as an integral part of the construction process.

A stormwater management plan was developed to mitigate impacts created by the proposed development and construction activities. The design plans include erosion control to ensure the effectiveness of the mitigating measures. Stormwater runoff from the driveway will be collected in deep-sump and hooded catch basins fitted with an oil sorbent bag to capture oil and sediment. The catch basin will then discharge directly into the adjacent wetlands area to maintain the existing flow going to the area to prevent impact on the area. The outlet from the catch basin is fitted with rip rap at the outlet to control erosion at the point of discharge. The main loop driveway within the site and all parking will be collected via swales and directed to one of three on-site sediment forbays which will allow for TSS removal and direct the flow into a large basin in the center of the site. With the anticipated soil infiltration rates this basin will not require an outlet and all flow will be infiltrated directly into the groundwater which will recharge surrounding surface water bodies due to the anticipated hydraulic connection. Rooftop runoff recharge is facilitated through an infiltration pits behind each of the three buildings. The infiltration pits will be fitted with catch basin rims to allow for natural overflow of the basins onto surrounding grass areas. The proposed on-site mitigation measures directly address total suspended solids removal and recharge to groundwater.

- B. The site development as proposed is a balance of site configuration, marketability and protection of the wetlands resources surrounding the site. The applicant proposes to utilize 50%± of the total property area for the development and surrounding buffer zones. This will include the buildings, parking, utilities, driveway and

associated grading for the project. It will also include the undeveloped areas of the 35' no-touch zones established by the Plainville Conservation Commission. The remainder of the property 50%± will be donated to the Plainville Conservation Commission. This portion of the property contains the area adjacent to the wetlands and Wetherell pond to the north west and the areas adjacent to the Ten Mile River in the South. This area also contains the majority of the site riparian zone and the entirety of the riparian within the 100' area, with the exception of the river crossing and drive.

The first option or alternative to the development as proposed would be two large apartment buildings constructed on the two knolls of the site. However this scenario would generate a more detrimental effect on the resource areas as a whole. With an area such as this with the sensitive nature 'Owners' of units are more likely to care for the land than a 'Renter' would be. This is due to the perception of the environment and your effect on it. This alternative was dismissed during the early stages of development.

The second option is reconfiguration of the units and a reduction in the number of units proposed. The site was reviewed for reconfiguration of the units at the early stages of design. If the buildings were stacked there would be a decrease in the overall development impact of the buildings in the riparian area however the impact of the property as a whole would be increased. The development as proposed allows for the 'inward' flow of all stormwater from the project. This stormwater is then filtered and discharged via infiltration to the groundwater and subsequently to the surrounding resource areas. There is limited impact from this type of discharge as opposed to point-source discharges from a detention basin or other control structure which would require an outlet pipe or more. The structure proposed contains back-to-back 100 yr storm events and allows for full infiltration of all stormwater with water-quality control.

This site is ideal for development of a project such as this or larger. The site is 11.3± Ac. with water views of the river and the pond. This site is somewhat unique in its positioning within the town as well as the area. The developer has designed a project which utilizes the land without utilizing every square foot of available space. The donation of land to the Town adjacent to the Waterfront allows for multiple property uses which benefit the Town and the developer as well as the abutting properties through utility improvements and upgrades. Therefore this site and alternatives for a project on this site only will be considered as substantially equivalent.

If there were frontage where a subdivision road could be installed this site could be developed as 40+ single family homes purely by acreage un the current zoning bylaw. This would be a significant impact on the site and would be a far greater impact on the surrounding property and the resource areas then that which is proposed. The developer has chosen to develop the property in a way which would net less overall profit to save some of the natural resources associated with the potential of development.

The option of a multi-family residential development was selected due to the low impact nature of the development on the site and surrounding properties. The Town of Plainville and the surrounding area is in need of some additional housing. The development incorporates alternative stormwater controls which will allow for more substantial water quality improvements than that which is required for the project site. These alternative technologies are more expensive to implement than the traditional BMP's utilized for stormwater design, however with the development as proposed the expense can be justified.

- C. Prior to construction, erosion control fencing and haybales will be installed to prevent the movement of sediment into the adjacent resource areas. Erosion is controlled with rip-rap velocity breakers at pipe ends and with suitable vegetation in the open space areas. During construction a temporary hay bale and silt fence erosion control barrier and gravel erosion control construction entrance are proposed.

The design includes mitigation for the wetland impacts at a greater than 1:1 replication which is specified by the State regulations. There will be approximately 14.5 : 1 replication of the wetlands adjacent to the on-site BVW. The wetland replication is far greater than the disturbed wetlands because the area on site where it is most feasible to replicate the disturbed wetlands creates approximately 4,350± s.f. with a minimal disturbance.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1) _
_ Yes No; if yes, specify each threshold:

II. Impacts and Permits

